

New Risk-Based Assessment Requirements for LPST Sites

Monica Scott, Responsible Party Remediation Section

The new and improved site assessment process for Leaking Petroleum Storage Tank (LPST) sites is here! In October 1995, the Responsible Party Remediation Section published the document and form entitled *Guidance for Risk-Based Assessments at LPST Sites in Texas: Emphasizing Initial Investigations and Plan A Evaluation* (RG-175) and *Assessment Report Form* (TNRCC-0562). This new guidance document defines the site assessment protocol and requirements which should be followed at newly confirmed and existing LPST sites. This new risk-based assessment (RBA) process and reporting replaces the Limited Site Assessment (LSA) guidance and report form.

In response to the passage of House Bill 2587 by the 74th Legislature, the TNRCC developed new rules to imple-

ment risk-based corrective action at LPST sites. As of November 8, 1995, the effective date of the new rules, this RBA process and report form must be used in order to meet site assessment requirements for newly reported LPST sites outlined in House Bill 2587 and corresponding rules. Any assessment proposals submitted after November 8, 1995 should be based on the RBA process and reporting.

The successful completion of the activities described in the RBA guidance document will satisfy the December 23, 1996 reimbursement deductible deadline for the submittal of a site assessment to the TNRCC. This deductible requirement is also satisfied when a risk-based priority has been assigned to a case based on valid field data collected during a LSA or other site investigation initiated prior to November 8, 1996 (the effective date of the new rules).

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This new risk-based assessment (RBA) process and reporting replaces the Limited Site Assessment (LSA) guidance and report form.

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New Risk-Based Assessment Requirements for LPST Sites

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RBA PROCESS

The RBA process is goal oriented, providing flexibility to collect the necessary site information in a quick and cost-effective manner. The RBA process does not follow a rigid set of procedures, but rather encourages a flexible scope of work which matches on-site conditions.

The RBA is an integral portion of the Petroleum Storage Tank Risk-Based Corrective Action (RBCA) program and involves a comprehensive source area evaluation. The goals of the RBA are to collect sufficient data to determine the degree and nature of the release and

impacts the site priority and to support a Plan A risk evaluation. If no assessment work has been conducted, then all of the minimum goals of the RBA must be addressed. If partial assessment work has already been completed, then only portions of these requirements may need to be addressed. This process allows the option to collect site specific data to support a Plan B evaluation and Corrective Action Plan (CAP) design.

The RBA process emphasizes the evaluation of data concurrent with the field investigation, allowing the number of sampling points to be based on actual subsurface conditions. Innovative technologies such as push tool and in-the-field analytical techniques may be used where appropriate. Where such technologies are not applicable, conven-

tional drilling can still be used with this process. New data must be evaluated and used to determine the next appropriate step toward completion of the process. Changes to the initial scope of work may be needed to best meet the goals of the assessment, and those in-the-field adjustments are supported by the TNRCC.

ASSESSMENT REPORT FORM

The Assessment Report Form, with all appropriate attachments, must be submitted in order to meet the reporting requirements for the site assessment. The report form must be complete and not altered to be accepted by the TNRCC. A workplan and cost proposal for the next appropriate corrective action activity should be attached to the assessment report form for reimbursable sites. If the table of content's checklist is not fully completed, the TNRCC will return the form to the responsible party without review. If the site cannot be prioritized under RBCA, and the Plan A site evaluation cannot be completed by the Corrective Action Specialist (CAS), then the site assessment is not adequate, and the report form should not be submitted to the TNRCC.

In October 1995, the new RBA guidance document and report form were mailed to registered CASS. The guidance document, *Guidance for Risk-Based Assessments at LPST Sites in Texas: Emphasizing Initial Investigations and Plan A Evaluation* (RG-175), and the report form, *Assessment Report Form* (TNRCC-0562), may be downloaded from the TNRCC Electronic Bulletin Board System (512/239-0700) or through the TNRCC Internet (see related

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... this RBA process incorporates a flexible decision framework to support a cost-efficient and technically valid site assessment.

GROUNDWATER MONITORING AND PRODUCT RECOVERY

REPORTING FREQUENCY CHANGES

Delonda Alexander, Team Leader, Responsible Party Remediation Section

Effective April 1, 1996, the reporting frequency has changed for LPST sites currently conducting groundwater monitoring and/or product recovery. The following changes and guidelines supercede any existing guidance and should be followed:

GROUNDWATER MONITORING

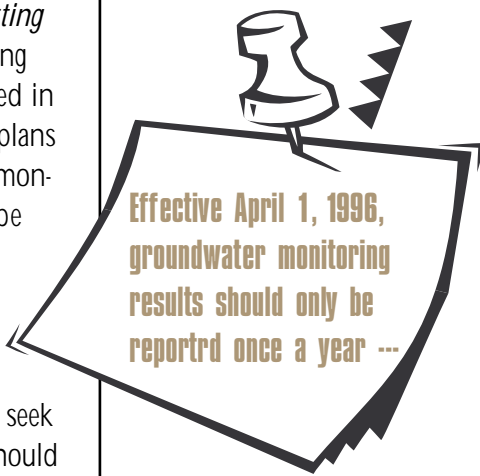
Currently, groundwater monitoring results are reported on a *Monitoring Event Summary and Status Report form (TNRCC-0013)* either quarterly or semi-annually, and summarized in an annual groundwater monitoring report, according to guidelines set forth in the pamphlet entitled *Groundwater Monitoring and Reporting (RG-43)*. Effective April 1, 1996, groundwater monitoring results should only be reported once a year, in an annual groundwater monitoring report, unless directed or approved to do otherwise by a case coordinator. A case coordinator may request the submittal of groundwater monitoring information on a more frequent basis if deemed necessary, based on site-specific conditions. Cumulative tables of analytical results and groundwater elevation data should be maintained throughout the annual monitoring cycle and attached to any proposals or reports submitted to the TNRCC for review. These cumulative tables should include the most current groundwater monitoring results and should be made available to the TNRCC during the course of the annual monitoring cycle if specifically requested by the case coordinator.

Please note that this change affects reporting frequency only, not sampling and


gauging frequency. The monitoring frequency should still be determined in the manner outlined in the pamphlet, *Groundwater Monitoring and Reporting (RG-43)*; however, these new reporting requirements supercede those outlined in the aforementioned pamphlet. Workplans and cost proposals for groundwater monitoring activities should continue to be submitted on an annual basis, but should only include costs to prepare one annual report. If a site is not eligible for reimbursement, or a responsible party does not intend to seek reimbursement, only the workplan should be submitted. If a workplan and cost proposal have already been approved for groundwater monitoring activities, the approved activities, including the approved reporting frequency should be completed. However, on future proposals, these guidelines for annual reporting should be followed. Reimbursable costs for workplans and cost proposals already submitted but not yet approved, will be adjusted to reflect this change in reporting requirements.

Additionally, please note that this change applies to routine groundwater monitoring only. Groundwater sampling, gauging and reporting associated with remedial action performance monitoring, or operation and maintenance monitoring may require different frequencies as set forth in other guidance documents or as directed by the case coordinator. Such monitoring programs should be developed and proposed as part of proposed remedial action plans.

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Effective April 1, 1996, groundwater monitoring results should only be reported once a year ---



Effective April 1, 1996, product recovery report forms should only be submitted on a semi-annual basis ---

GROUNDWATER MONITORING AND PRODUCT RECOVERY REPORTING FREQUENCY CHANGES

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Therefore, if a site has entered the remediation phase, and the groundwater monitoring and reporting frequency has already been approved, the approved activities should be completed. Future monitoring and reporting frequencies should be determined based upon available guidance or as approved by a case coordinator, based upon site-specific conditions. In most cases, groundwater monitoring results will be reported annually in a remediation system performance report.

PRODUCT RECOVERY

Currently, product recovery activities are reported monthly on a *Monthly Product Recovery Report Form (TNRCC-0025)* as specified in *Reporting Guidelines for LPST Cleanups in Texas (PST 93-01)*. Effective April 1, 1996, product recovery report forms should only be submitted on a semi-annual (6 month) basis unless directed and approved to do otherwise by a case coordinator. The case coordinator may request the submittal of product recovery information on a more frequent basis if deemed necessary based on site-specific conditions. This new reporting frequency also applies to product recovery associated with groundwater remediation systems. If a remediation system is currently in operation at a site, annual operation and maintenance, groundwater monitoring and performance reports may be required in addition to semi-annual product recovery reports.

Please note that this change affects reporting frequency only, not product removal frequency. Product recovery should continue on the schedule appropriate for the project. Additionally, even though the

results will now be reported on a semi-annual basis, the amount of product recovered should still be broken down into monthly increments on an attached table (i.e., the total amount recovered per month and the total amount recovered to date should be indicated on the form). Also, a graph of the cumulative product recovered versus time should be attached to the form. Cumulative product recovery information should be maintained and updated continuously, and be made available to the TNRCC in between reporting periods if specifically requested by the case coordinator, or with other reports or proposals submitted to the TNRCC.

Please begin using the attached form, *Product Recovery Report (TNRCC-0025, 2/96)*, for semi-annual product recovery reporting. This new form will replace the *Monthly Product Recovery Report (TNRCC-0025)* form. Although preapproval is not required for product recovery, any workplan and cost proposal submitted for product recovery should be in annual (once a year) intervals. If a workplan and cost proposal have already been approved for product recovery activities, the approved activities, including the approved reporting frequency, should be completed. However, on future proposals, please follow these guidelines for semi-annual reporting. Reimbursable costs for any workplans and cost proposals already submitted but not yet approved, will be adjusted to reflect this change in reporting requirements. Unless otherwise preapproved, only the referenced semi-annual product recovery reports will be eligible for reimbursement, effective April 1, 1996.

If you have
questions
regarding these
reporting
changes, please
contact the
Responsible
Party
Remediation
Section at 512/
239-2200.

Corrective Action Rules Revised

Chris Chandler, Responsible Party Remediation Section

The corrective action regulations have changed! In response to House Bill 2587 passed by the Texas Legislature in 1995, the TNRCC has revised the PST program rules, including the rules regarding Release Reporting and Corrective Action (Subchapter D, Chapter 334).

- ▼ Identification of all potential exposure pathways;
- ▼ A determination of the site classification (the site's risk-based priority); and
- ▼ A Plan A risk evaluation to establish target concentrations.

The Subchapter D rule changes cover two main topic areas. The first involves the site assessment conducted after a release has been confirmed. (See Section 334.78.) This site assessment previously included the collection of the following information:

- ▼ Information gained while confirming the release or completing the initial abatement measures;
- ▼ Information about the nature, cause, and estimated quantity of the release;
- ▼ Data on surrounding land use, subsurface soil conditions, quality of water, use and locations of potentially affected water wells, and locations of subsurface utility lines;
- ▼ Results of the site check conducted to measure for the presence of a release where contamination is most likely to be present;
- ▼ Results of any free product investigation; and
- ▼ Any other related information requested by the TNRCC.

The revised rules have added requirements for the following information:

- ▼ A determination of the degree and lateral and vertical extent of the on-site contaminated area (soil and groundwater);

To assist owners and operators with the new site assessment procedures, the PST Division has published a guidance document entitled *Guidance for Risk-Based Assessments at LPST Sites in Texas* (see related article in this edition of *PST News*).

Please note that the term "site assessment" as used in the corrective action program means the assessment(s) conducted after a release is confirmed when there is documentation that action levels have been exceeded, that is, when the site is designated as an LPST site. The term does not apply to activities conducted to find out whether a release has occurred; this is known as a release determination. Completion of the site assessment components outlined above will satisfy the reimbursement rule requirements relating to the owner/operator's deductible amounts for the PST Remediation Fund. (See Section 334.312 of Subchapter H.)

The second Subchapter D topic involves the development of a corrective action plan. (See Section 334.81.) This plan

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The Subchapter D rule changes cover two main topic areas --- site assessment and corrective action plans.

Scientific and Engineering Professionals - Policy Advisory

During the summer of 1995, discussions took place between the TNRCC and the Texas State Board of Registration for Professional Engineers. The purpose of these discussions was to develop a common understanding of the working definition of engineering with respect to corrective action at leaking petroleum storage tank sites. A Memorandum of Agreement was signed, for coordination purposes, for application to the PST Program only.

The spirit of this agreement is one of cooperation. Both geological and engineering expertise are needed during different phases of corrective action. The following chart spells out the agreed division of work:

GEOLOGICAL AND OTHER NON-ENGINEERING SERVICES	ENGINEERING SERVICES
Emergency Response/Temporary Abatement Measures: Actions required to mitigate an actual or threatened release of a regulated substance in order to protect public health and safety or the environment from immediate harm. Examples: interceptor trenches, ventilation fans, excavation.	
Site Assessment: Any data acquisition and interpretation necessary to characterize the hydro-geological conditions at a site. This includes definition of the magnitude and extent of contamination, as well as contaminant fate and transport analysis. Examples: monitoring wells, direct push surveys, aquifer tests.	Engineered Wellhead Protection
Risk Assessment: Use of risk concepts and procedures to determine target health based concentrations of contaminants in soil, water and air. Evaluations are based on PST/RBCA guidelines.	
	Remedial Action Plan Design: Data evaluation or design for remedial action plan development. Examples: selection and evaluation of appropriate corrective action technology(ies) and preparation of plans and specifications.

GEOLOGICAL AND OTHER NON-ENGINEERING SERVICES	ENGINEERING SERVICES
System Installation: Remediation system installed under engineering oversight.	Remedial Action Oversight: System installation, operation and maintenance, under the observation and determination of general conformance with plans by a Professional Engineer.
Operation and Maintenance: Qualified technicians perform regular and timely site visits to gather data about the remediation system. Examples: Influent/ Effluent samples, pressure readings.	Remedial Action Evaluation: Site data are evaluated to determine progress, efficiency and efficacy of the remediation system. Data are reviewed and system adjustments made to optimize performance.
Monitoring and Evaluation: Data are acquired and evaluated to determine site status. Monitoring is done throughout a site's history. Examples: Monitoring prior to Site Assessment, monitoring to confirm closure.	

TNRCC representatives who were responsible for achieving this agreement with the Texas State Board of Registration for Professional Engineers:

Chet Clark, Section Manager, RPR Section
Danny Lien, Section Manager, State-Lead Remediation Section
Anton Rozsypal, Section Manager, Technical Services Section

PST REGISTRATION NEWS

Jackie Hardee, Section Manager, Registration Section

Revised Underground and Aboveground Registration Forms have been mailed to all tank owners and should be used in place of the old forms as of September 1, 1995. The revised forms can be obtained at the TNRCC Regional Offices, or at the TNRCC Central Office in Austin by calling (512) 239-2160. The new registration forms allow tank owners and operators to report compliance on financial responsibility requirements for both corrective action and third party liability. The forms were also redesigned to conform with the state's storage tank regulations, so that information on Stage II Vapor Recovery and underground storage tanks upgrades could be properly reported.

After December 31, 1995, all underground and above-ground tanks must be registered with the TNRCC in order for any potential corrective action expenses to be considered eligible for reimbursement. Storage tanks installed after December 1, 1995, must be registered within 30 days of installation to be eligible for any future reimbursement of corrective action expenses. Individuals who discover underground storage tanks on their property after January 1, 1996, will be eligible for reimbursement of corrective action expenses only if they can demonstrate that previous land use and title searches failed to suggest the presence of any underground storage tanks on the property.

The TNRCC staff offered a series of 31 free seminars across the state to help tank owners determine whether they had tanks that should have been registered by December 31, 1995, how to register those tanks, and how to apply for reimbursement for corrective action expenses. Other questions concerning the technical standards and remediation of the tanks were also addressed during these seminars. The seminars were well attended with an average of 20 people at each seminar. Additional seminars are being considered for 1996 to discuss future deadlines and issues in the storage tank program which will affect tank owners and operators. Tank owners, tank contractors and environmental consultants will be notified of future developments on storage tank seminars.

Corrective Action Rules Revised

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specifies the procedures that will be used to clean up the site. If necessary, the plan is submitted by the owner/operator after the target cleanup goals have been determined using risk-based corrective action. Under the previous rules, the TNRCC would consider the following factors when approving a corrective action plan:

- ▼ The physical and chemical characteristics of the contaminant;
- ▼ The hydrogeologic characteristics of the site and surrounding area;
- ▼ The quality and uses of nearby surface water and groundwater;
- ▼ The potential effects of residual contamination on nearby surface water and groundwater;
- ▼ An exposure assessment; and
- ▼ Any other corrective action information collected.

The revised rules include the following additional factors:

- ▼ A determination of the most effective and feasible method of remediation;
- ▼ An estimate of the time needed for cleanup;
- ▼ A remedial progress monitoring plan; and
- ▼ An operation and maintenance plan.

Another corrective action rule change involves the procedures for determining cleanup goals at the site. Owners and operators should now refer to Chapter 334, Subchapter G, entitled Target Concentration Criteria, for the procedures to determine appropriate target cleanup goals based on the risk which the contamination poses to human health. An accompanying guidance document, *Risk-Based Corrective Action for Leaking Storage Tank Sites (RG-36)*, should be consulted for additional information. Tank owners and operators should always consult with a qualified registered Corrective Action Specialist (CAS) for assistance with these procedures. Please remember that all corrective action activities must be performed by a Corrective Action Specialist and supervised by a Corrective Action Project Manager (CAPM). A list of registered CASs and CAPMs is available by contacting the TNRCC's Occupational Certification Section at 512/239-2192.

For additional information on corrective action activities, please contact the Responsible Party Remediation Section at 512/239-2200.

Corrective Action Plan Preparation

Ike Ikemba, Remediation Coordinator, Responsible Party Remediation Section

Corrective action plan (CAP) preparation involves the selection of the most effective cleanup technology for a Leaking Petroleum Storage Tank (LPST) site. Because each LPST site is unique, a remedial technology that works well at one site may not be suitable for another site, even though both sites may be located on the same geologic formation.

To initiate the process of CAP development, adequate background information should be collected and verified. One of the prerequisites for CAP preparation is the completion of a pilot test to determine the type of technology that will be most effective for a given site. (Also, please remember that recent legislation now requires a professional engineer for some CAP activities.) A pilot test is a small-scale application of the proposed technology to determine whether or not it will work at a site. In the past, some CAPs have been prepared and submitted to the TNRCC without the appropriate pilot test data. These CAPs usually prove to be ineffective and costly to implement and operate. Typically, only CAPs for minor soil contamination may be prepared or implemented without first conducting a pilot test. Additionally, a product recovery system that does not include groundwater recovery may be installed without first conducting a pilot test.

A CAP should be easy to conceptualize. It should include a well-defined and scaled layout of extraction/injection points, piping, the remediation compound, and any other key components. Each component of the proposed system should be clearly identified on a system schematic diagram. A system schematic diagram is a line diagram with arrows that connect the various system components in a systematic manner to show the overall process flow. A well-illustrated schematic is the best tool to use to explain how a proposed system will operate. Because the schematic provides an accurate picture of all of the various processes involved in the operation of a remedial system, the time required to evaluate the feasibility of a proposed remedial system is reduced.

The pilot test results and the system schematic diagram are some of the most important technical components of a CAP. Because the TNRCC realizes that limited financial resources are available to clean up contaminated sites, case coordinators focus on the technical justification for any CAP submitted to address contamination at an LPST site. If you have any questions regarding CAP preparation, please contact the Responsible Party Remediation Section at 512/239-2200.

PST Information on the Internet

Mike Leckie, Responsible Party Remediation Section

You are cordially invited to visit the TNRCC Petroleum Storage Tank Division on the Internet at the following address (URL):

<http://www.tnrcc.state.tx.us/waste/pst/pst.htm>

You will find up-to-date information on PST publications, rules, seminars, and even Leaking Petroleum Storage Tank (LPST) site data.

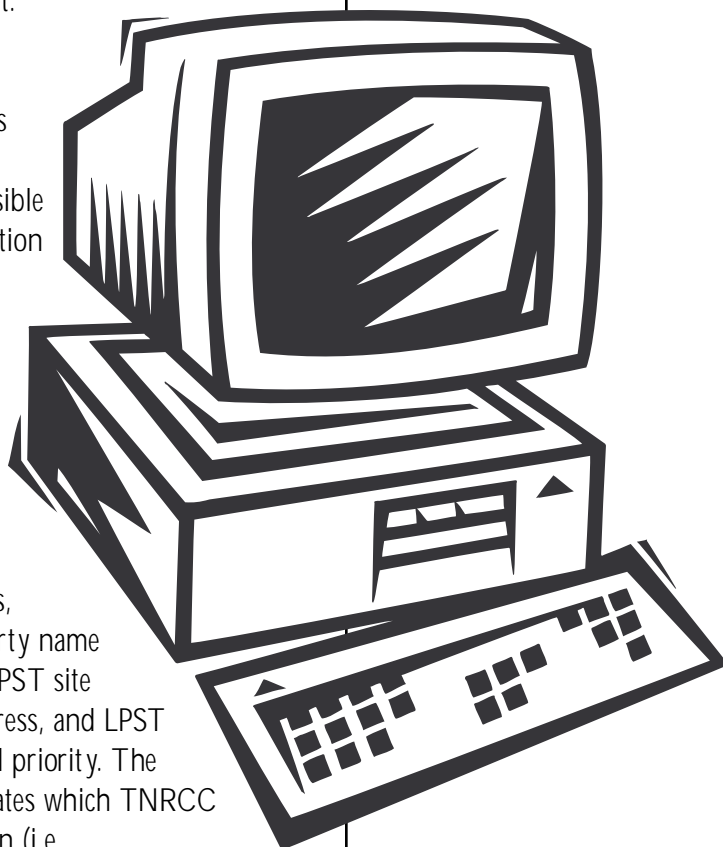
Numerous PST guidance documents are now available for downloading via the Internet and the electronic bulletin board system BBS (see the Fall 1995 issue of PST News for information on the BBS). Available documents include:

- ▼ The new assessment document, *Guidance for Risk-Based Assessments and LPST Sites in Texas* (RG-175) and the accompanying form, *Assessment Report Form* (TNRCC-0562);
- ▼ The revised document, *Preapproval for Corrective Action Activities* (RG-111) and the accompanying forms;
- ▼ The document entitled *Risk-Based Corrective Action for Leaking Storage Tank Sites* (RG-36); and
- ▼ The revised *EZ Reimbursement Application* (TNRCC-0230-EZ) and the *Reimbursement Guidance Manual* (RG-174).

Documents and accompanying forms are available for downloading free of charge, except for any phone/services charges you may incur from your carrier. These documents and the accompanying forms are currently available in WordPerfect® 6.1, and other available formats. As the TNRCC upgrades its internal software,

the available formats for future releases of documents will be limited to the software formats in use at the time the document is made available. You may still obtain hard copies of our documents by contacting TNRCC Publications Inventory and Distribution at 512-239-0028. A listing of available corrective action guidance documents and forms can be found on the PST Division order form which is also available via the Internet.

Another item available at this time is a customized Responsible Party Remediation (RPR) Section database that includes the basic LPST case information such as the release discovery and reporting dates, responsible party name and address, LPST site name and address, and LPST case status and priority. The database indicates which TNRCC office or section (i.e., a Region Office, RPR, State-Lead Remediation) is coordinating the case and who the RPR Coordinator is, if one has been assigned. This information may be accessed by entering the LPST ID number. Future enhancements will include a search feature which will query LPST cases by site address. Other PST databases, such



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REGIONAL OFFICES

TNRCC REGIONS	AIR PROGRAM	WATER/ WASTE PROGRAMS
1-Amarillo 3918 Canyon Drive, Amarillo, TX 79109-4996 806/353-9251 FAX: 806/358-9545 Regional Manager - Brad Jones		
2-Lubbock 4630 50th St., Suite 600, Lubbock, TX 79414-3509 806/796-7092 FAX: 806/796-7107 Regional Manager - Jim Estes		
3-Abilene 209 South Danville, Suite 200B, Abilene, TX 79605 915/698-9674 FAX: 915/692-5869 Regional Manager - Winona Henry		
4-Arlington 817/732-5531 FAX: 817/732-0175 Regional Manager - Melvin Lewis	6421 Camp Bowie Blvd., Suite 312 Fort Worth, TX 76116 817/732-5531 FAX: 817/732-0175	1019 N. Duncanville Rd. Duncanville, TX 75116-2201 214/298-6171 FAX: 214/709-1181 407 North Cedar Ridge, Suite 230, Duncanville, TX 75116 214/283-3703 FAX: 214/709-1181
5-Tyler 903/566-0476 FAX: 903/566-9216 Regional Manager - Leroy Biggers	1304 South Vine Ave. Tyler, TX 75701 903/595-2639 FAX: 903/595-1562	11406 Hwy. 64 East Rt. 14, Box 254, Tyler, TX 75707 903/566-0476 FAX: 903/566-9216 2916 Teague, Tyler, TX 75701 903/595-5466 FAX: 903/593-2542
6-El Paso 7500 Viscount Blvd., Suite 147, El Paso, TX 79925 915/778-9634 FAX: 915/778-4576 Regional Manager (Acting) - Archie Clouse		
7-Odessa 2626 J.B. Shepperd Pkwy. Blvd., Bldg. B-101, Odessa, TX 79761 915/362-6997 FAX: 915/362-4517 Regional Manager - Jed Barker		
8-San Angelo 301 W. Beauregard Ave., Suite 202, San Angelo, TX 76903 915/655-9479 FAX: 915/658-5431 Regional Manager - John Haagensen		
9-Waco 6801 Sanger Ave., Suite 2500, Waco, TX 76710-7807 817/751-0335 FAX: 817/772-9241 Regional Manager - Gene Fulton		
10-Beaumont 3870 Eastex Fwy., Suite 110, Beaumont, TX 77703-1830 409/898-3838 FAX: 409/892-2119 Regional Manager - Vic Fair		
11-Austin 1921 Cedar Bend, Ste. 150, Austin, TX 78758 512/339-2929 FAX: 512/339-3795 Regional Manager - Larry Smith		
12-Houston 5425 Polk Avenue, Ste. H, Houston, TX 77023-1423 713/625-7900 FAX: 713/625-7987 Regional Manager - Allen Parker		
13-San Antonio 140 Heimer Rd., Suite 360, San Antonio, TX 78232-5042 210/490-3096 FAX: 210/545-4329 Regional Manager - Richard Garcia		
14-Corpus Christi 512/851-8484 FAX: 512/851-2666 Regional Manager - Buddy Stanley	1231 Agnes St., Suite 103 Corpus Christi, TX 78401 512/882-5828 FAX: 512/882-7364	4410 Dillon Ln., Suite 47 Corpus Christi, TX 78415-5326 512/851-8484 FAX: 512/851-2666
15-Harlingen 134 E. Van Buren, Ste. 301, Harlingen, TX 78550 210/425-6010 FAX: 210/412-5059 Regional Manager - Tony Franco		
TNRCC Laboratory 5144 E. Sam Houston Pkwy. N., Houston, TX 77015 713/457-5229 FAX: 713/457-9107 Lab Manager - Jim Busceme		

Regional Offices

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Region 1 - Amarillo

Armstrong	Hemphill
Briscoe	Hutchinson
Carson	Lipscomb
Castro	Moore
Childress	Ochiltree
Collingsworth	Oldham
Dallam	Parmer
Deaf Smith	Potter
Donley	Randall
Gray	Roberts
Hall	Sherman
Hansford	Swisher
Hartley	Wheeler

Region 2 - Lubbock

Bailey	King
Cochran	Lamb
Crosby	Lubbock
Dickens	Lynn
Floyd	Motley
Garza	Terry
Hale	Yoakum
Hockley	

Region 3 - Abilene

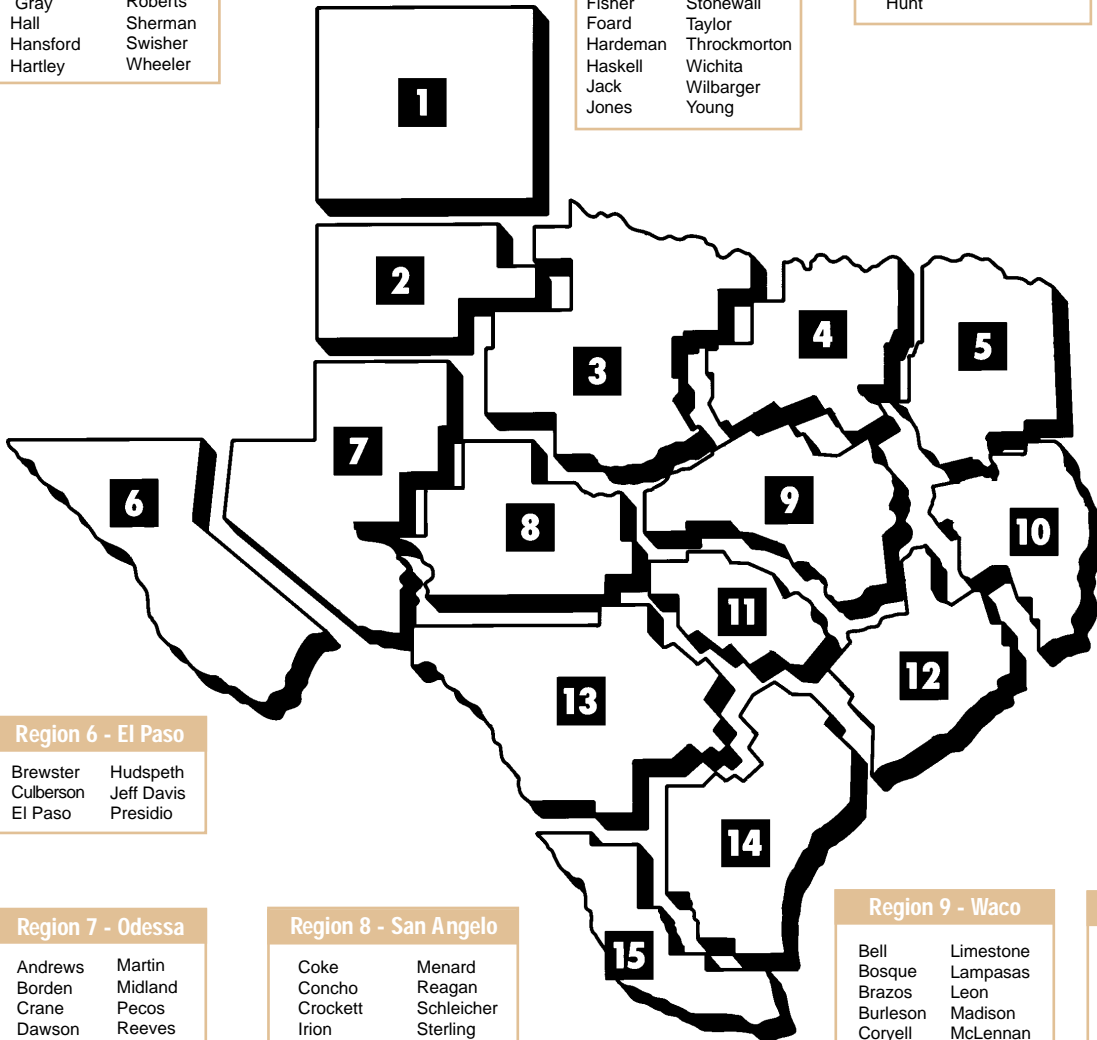
Archer	Kent
Baylor	Knox
Brown	Mitchell
Callahan	Montague
Clay	Nolan
Coleman	Runnels
Comanche	Scurry
Cottle	Shackelford
Eastland	Stephens
Fisher	Stonewall
Foard	Taylor
Hardeman	Throckmorton
Haskell	Wichita
Jack	Wilbarger
Jones	Young

Region 4 - Arlington

Collin	Johnson
Cooke	Kaufman
Dallas	Navarro
Denton	Palo Pinto
Ellis	Parker
Erath	Rockwall
Fannin	Somervell
Grayson	Tarrant
Hood	Wise
Hunt	

Region 5 - Tyler

Anderson	Marion
Bowie	Morris
Camp	Panola
Cherokee	Rains
Cass	Red River
Delta	Rusk
Franklin	Smith
Gregg	Titus
Harrison	Upshur
Henderson	Van Zandt
Hopkins	Wood
Lamar	



Region 6 - El Paso

Brewster	Hudspeth
Culberson	Jeff Davis
El Paso	Presidio

Region 7 - Odessa

Andrews	Martin
Borden	Midland
Crane	Pecos
Dawson	Reeves
Ector	Terrell
Gaines	Upton
Glasscock	Ward
Howard	Winkler
Loving	

Region 8 - San Angelo

Coke	Menard
Concho	Reagan
Crockett	Schleicher
Irion	Sterling
Kimble	Sutton
Mason	Tom Green
McCulloch	

Region 9 - Waco

Bell	Limestone
Bosque	Lampasas
Brazos	Leon
Burleson	Madison
Coryell	McLennan
Falls	Milam
Freestone	Mills
Grimes	Robertson
Hamilton	San Saba
Hill	Washington

Region 10 - Beaumont

Angelina	Polk
Hardin	Sabine
Houston	San Augustine
Jasper	San Jacinto
Jefferson	Shelby
Nacogdoches	Trinity
Newton	Tyler
Orange	

Region 11 - Austin

Hays	Bastrop
Lee	Blanco
Llano	Burnet
Travis	Caldwell
Williamson	Fayette

Region 12 - Houston

Austin	Harris
Brazoria	Liberty
Chambers	Matagorda
Colorado	Montgomery
Fort Bend	Walker
Galveston	Waller
	Wharton

Region 13 - San Antonio

Atascosa	Kerr
Bandera	Kinney
Bexar	LaSalle
Comal	Maverick
Dimmit	Medina
Edwards	Real
Frio	Uvalde
Gillespie	Val Verde
Guadalupe	Wilson
Karnes	Zavala
Kendall	

Region 14 - Corpus Christi

Aransas	Kenedy
Bee	Kleberg
Brooks	Lavaca
Calhoun	Live Oak
DeWitt	McMullen
Duval	Nueces
Goliad	Refugio
Gonzales	San Patricio
Jackson	Victoria
Jim Wells	

Region 15 - Harlingen

Cameron	Webb
Hidalgo	Willacy
Jim Hogg	Zapata
Starr	

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New Risk-Based Assessment Requirements for LPST Sites

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article in this edition of PST News). The documents may also be obtained by contacting TNRCC Publications at 512/239-0028. If you have any questions about risk-based corrective action or these new documents, please call the Responsible Party Remediation Section at 512/239-2200.

The TNRCC believes that this RBA process incorporates a flexible decision framework to support a cost-efficient and technically valid site assessment. The cooperation of responsible parties and CAS's in using this process will play an important role in our success!

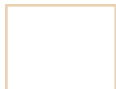
PST Information on the Internet

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as the reimbursement database, will become accessible in the future.

The PST rules are currently available through the TNRCC Internet Home Page and discussions are underway with the Secretary of State's Office to request the continued provision of rules for your reference.

Other program areas of the TNRCC also have information available on the Internet, ranging from job announcements, agenda calendars, and ozone data to a campus map of the TNRCC Central Office and a directory of the Region Offices. Log on to the Internet to see what is available!



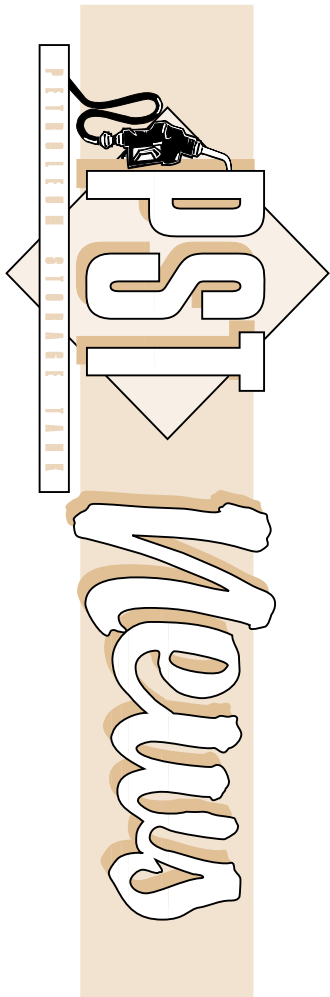
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